# SOME NOTES ON THE SPOON-WINGED LACEWING
## *(Chasmoptera hutti)*

By WALLACE H. MATHEWS, South Perth.

This lacewing is the most rare of all of our lacewings, for although it was first discovered in the time of Governor J. T. Hutt, who arrived in Western Australia in 1839, and after whom it is named, very little is known of its life history. Although I studied it for several years, and shifted at least hundredweights of sand looking for the larva, I am still not sure that I have found it, for those which I did find I was not able to breed up to prove their identity. The larva figured in this article therefore, can only be labelled the *presumed* larva of *Chasmoptera hutti.*

As my field days are, unfortunately, ended, I must leave it to some younger person to carry on from where I finished and complete the life history of this unique insect. If there is such a one who will undertake this most interesting study I am prepared to place what knowledge I have gained of the subject at his disposal, as I am most anxious to see its history completed.

*Chasmoptera hutti* is a member of the sub-family Nemopterinae or Spoon-winged Lacewings and with the Croeinae or Thread-winged Lacewings, compose the family of Nemopteridae. The Nemopterinae are represented in Western Australia by at least two, and probably three, species: *C. hutti,* first collected "near a swamp on the road between Perth and Guildford" in the early half of the nineteenth century; *C. superba,* which was found at Cunderdin in 1914; and Mr. L. Glauert of the Western Australian Museum has recently received another specimen from Shark's Bay which may prove to be still another species.

Dr. R. J. Tillyard says of these insects: "The family Nemopteridae includes the Spoon-winged Lacewings and the Thread-winged Lacewings which are the most remarkable insects in the whole order Neuroptera. They range from the Mediterranean region down to South Africa and across to India, with an extension to Western Australia and across to the dry parts of Queensland, only a single species, *Croce attenuata,* Frogg. is so far known to reach Queensland, but Western Australia possesses species of both sub-families." His description reads: "A group of extraordinary lacewings in which the head is prolonged forward into a rostrum, the antennae are short, cylindrical and thickened and the first segment of the abdomen is closely united with the thorax. The hindwing is remarkably specialised, being excessively long and narrow, either ribbon-like, or with one or two expanded parts, more or less spoon-shaped, and twisted round upon itself between expansions. The forewing has a primitive Myrmeleontoid type of venation."

Then he proceeds to make a statement with regard to the larvae, which I am sure is purely speculative. He says: "Larvae dwelling in sand or debris, with stout body, long slender neck, caliper-like jaws with or without teeth." *(The Insects of Australia and New Zealand,* 1926, p. 320). From personal knowledge I know

that Dr. Tillyard had never seen the larva, though he was most anxious to do so, and was probably basing his description on the supposed larva of a related species found near the Egyptian pyramids, where sand had drifted and accumulated. The description of this latter insect reads: "It has a head and body much like

**CHASMOPTERA HUTTI: Above, female on left, male on right; below, the presumed larva.**

—Photos by W. H. Mathews

those of an ant-lion, though with longer legs, but part of the forebody is scarcely thicker than its thighs and drawn out to one-half the entire length of the insect, so that it looks like an extravagant neck."

The insect which I believe to be the larva of *C. hutti,* as will

be seen from the figure, has not this elongated neck. It has typical ant-lion jaws, though without teeth, and its claws are also typical.

I secured two or three specimens only, after many hours of search with a sieve and trowel, but I was unable to breed them up, possibly because I had not the right food for them. I think possibly they may feed on "Leather-jackets", the larvae of a Tipulid, as I found a number of these in the vicinity. The lace-wing larvae which I found, moved freely through the loose surface sand and did not construct a pit. They were about three-eighths of an inch long and about half that in width, cream in colour with the jaws brown, two sharp claws on each foot and the body sparsely covered with short stiff hairs.

The imago is very restricted in regard both to the locality of occurrence and period of flight. I have only found them along one particular ridge in South Perth and only flying for about 10 days at the beginning of December, though they have been reported, on good authority, as having been seen in Victoria Park, near the Kent Street School. I have brought numerous specimens home and kept them alive for a week or more by feeding them on cotton-wool saturated with sugar or honey and water, but I never saw them mate nor did the females lay. I have also liberated a number on my property in the hopes that I might establish them here, but without success.

## FROM FIELD AND STUDY

**Wedge-tailed Shearwater at Rottnest Is.**—On January 10, 1947, while I was on holidays at Rottnest Island I waded out to Green Island at Nancy Cove. The top of this islet is rounded and has many holes and cavities, some covered by pig-face. In one hole I found a Wedge-tailed Shearwater *(Puffinus pacificus)* brooding on an egg and more shearwaters were noticed in other crevices. Previously these birds had been thought to nest only at the West End and Dyer's Island in the Rottnest area.

—W. R. SERVENTY, Nedlands.

**Cuckoo Bees *(Crocisa)* at Bunbury.**—It may be news to some that in Australia we have a small genus of bees with parasitic habits. W. W. Froggatt, at one time Government Entomologist in New South Wales, refers to three species in his splendid book, *Australian Insects*. He remarks: "The genus *Crocisa* contains a few very handsome bees of a uniform black colour with smoky rings and brightly marked bodies. *C. albomaculata* has the face, upper and under surface and legs thickly marked with white pubescence." Another species, *C. lamprosoma,* has the white replaced by pale blue. A third species, *C. nitidula,* has the pale blue replaced by rich metallic blue.

In the West we have one species, *C. waroonensis* at Bunbury. This handsome bee, about the size of the common hive bee, may be seen flying over the perfumed flowers of the Quandong. It sel-